

FIG. 1a

208040-68E2E00F

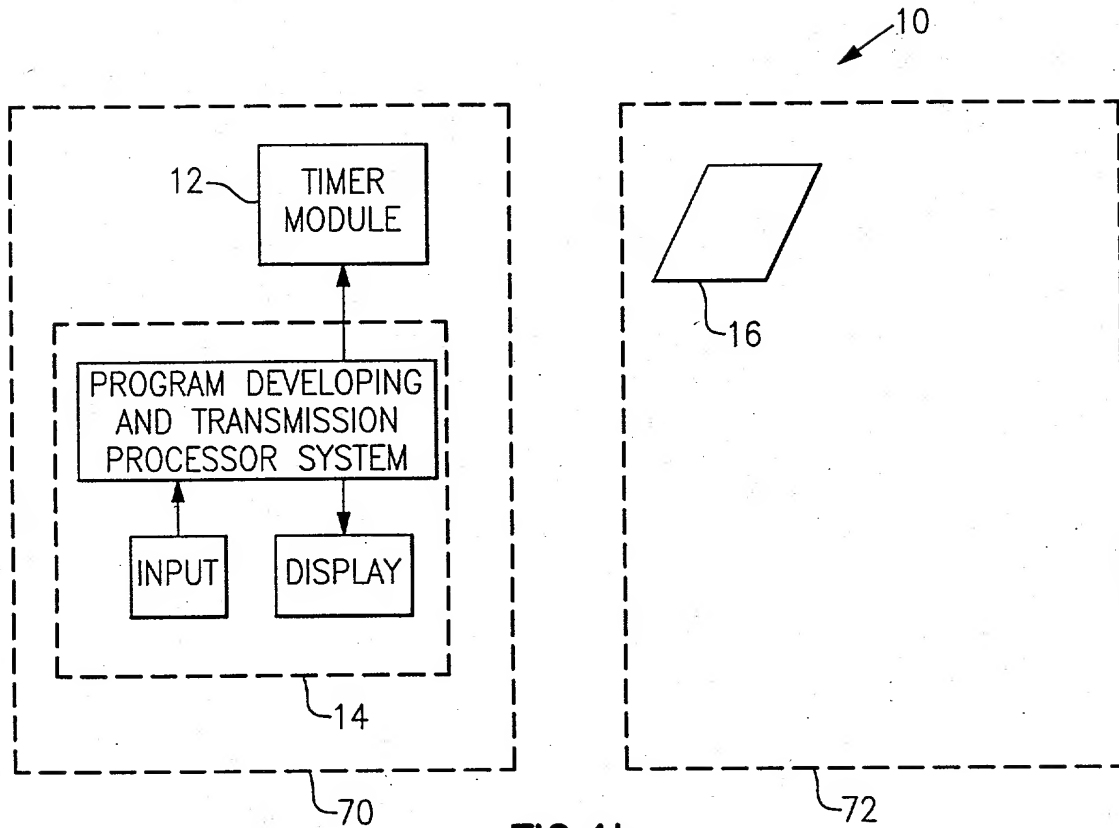


FIG. 1b

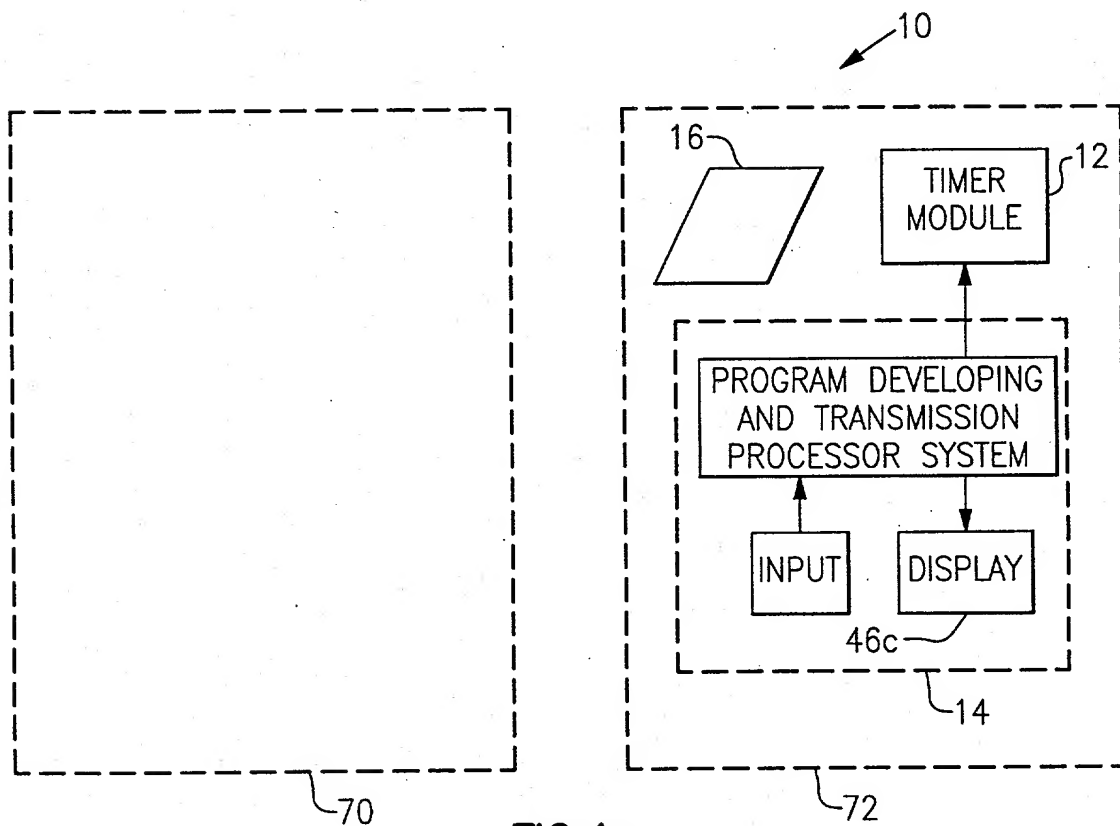


FIG. 1c

10037389-040802

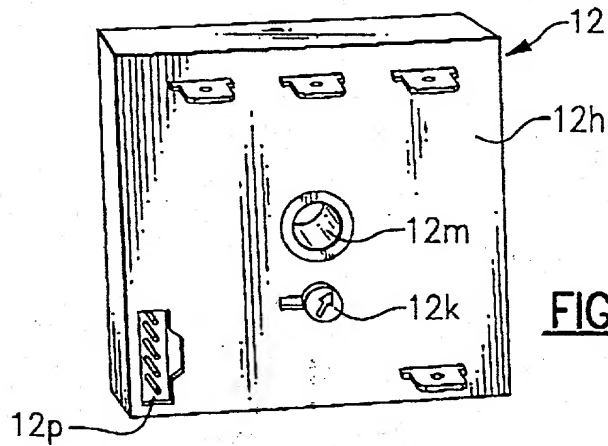


FIG. 1e

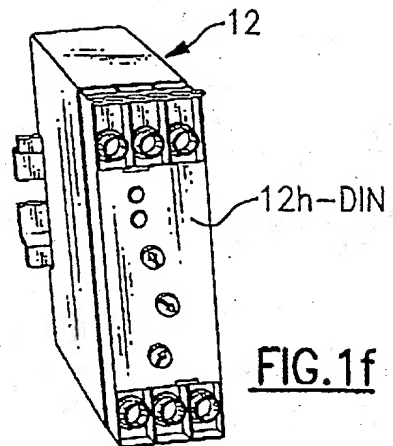


FIG. 1f

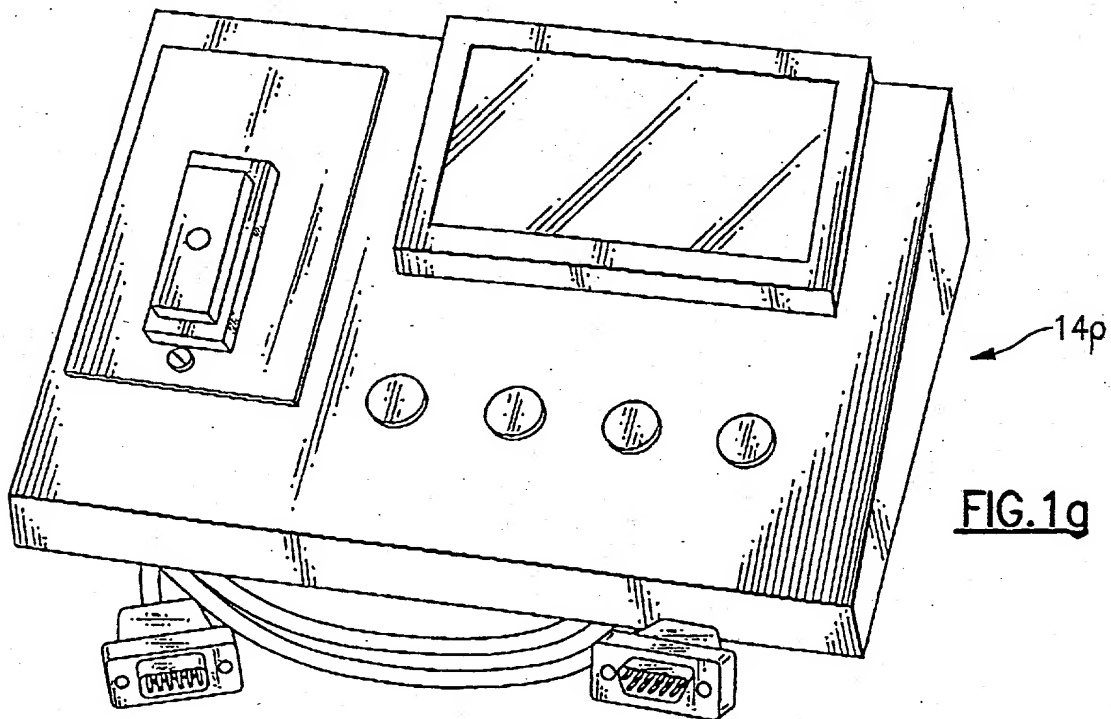


FIG. 1g

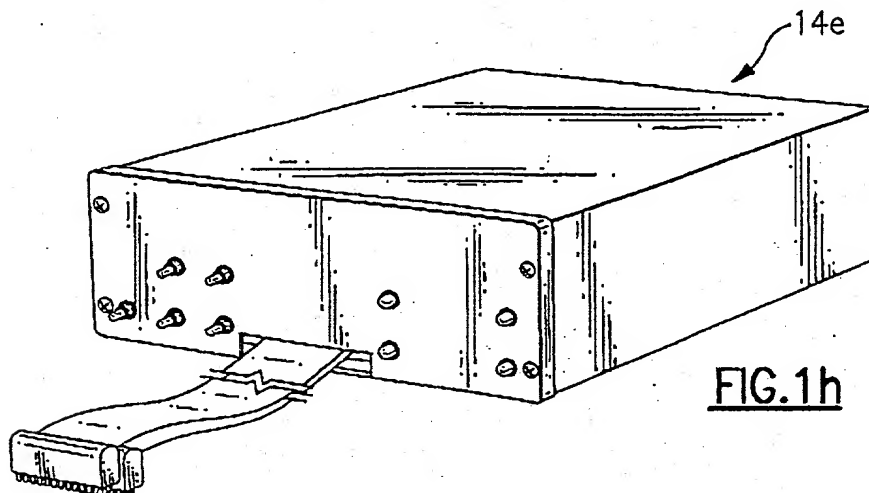


FIG. 1h

10037389.040802

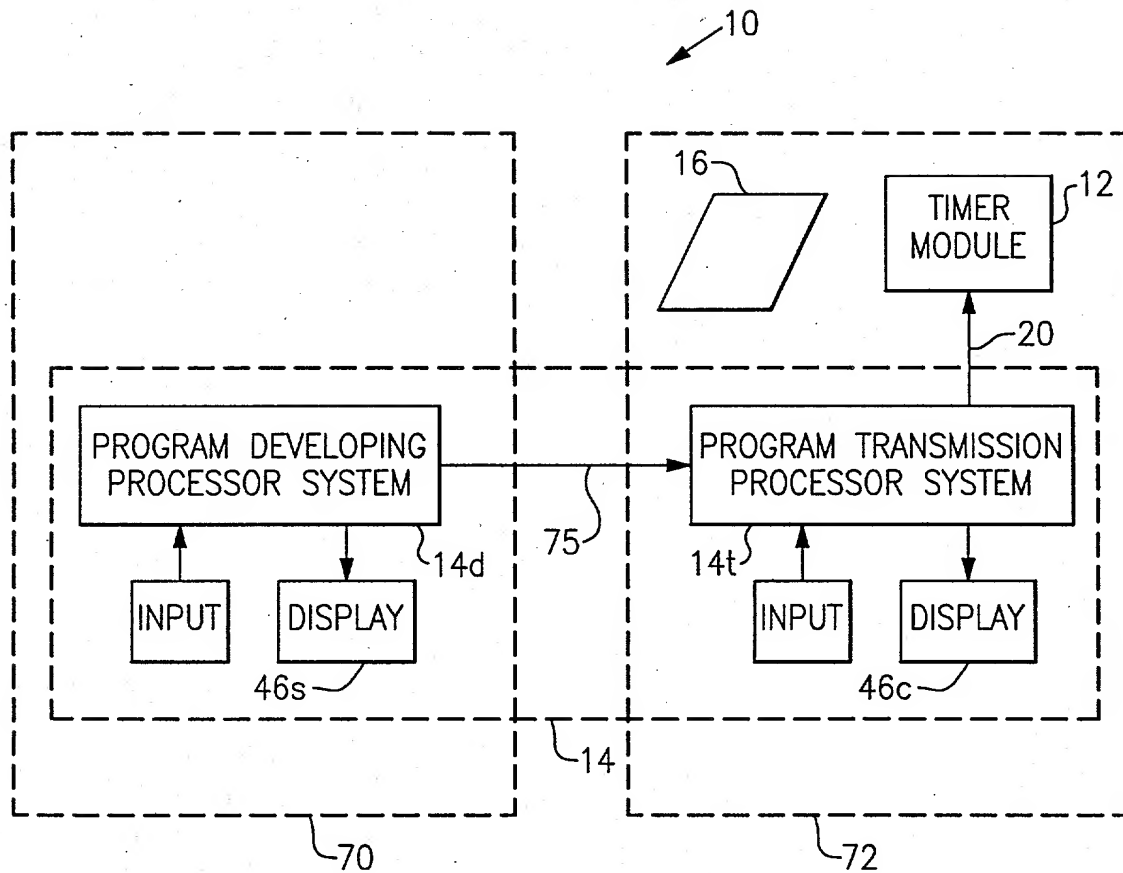


FIG.1d

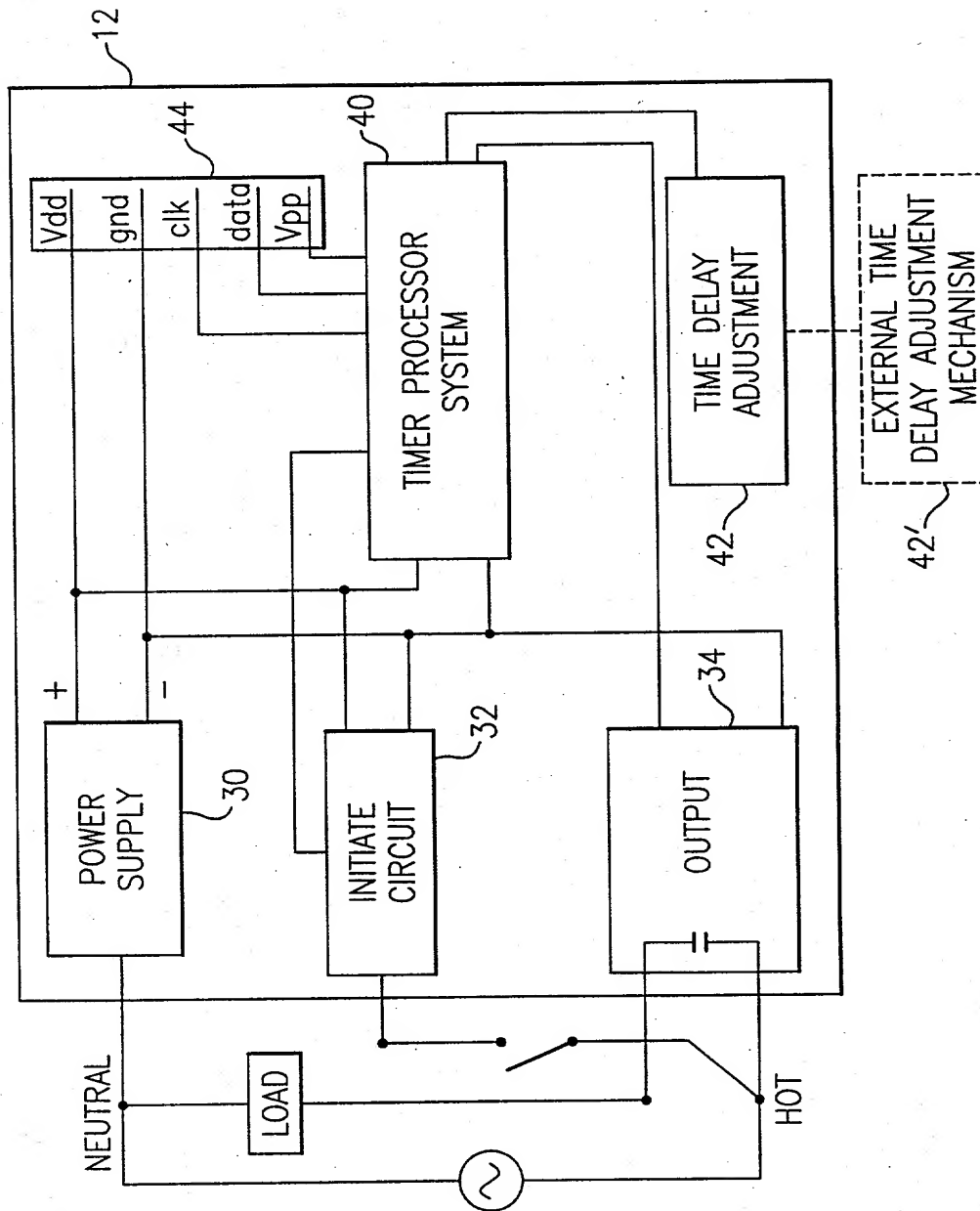


FIG. 2a

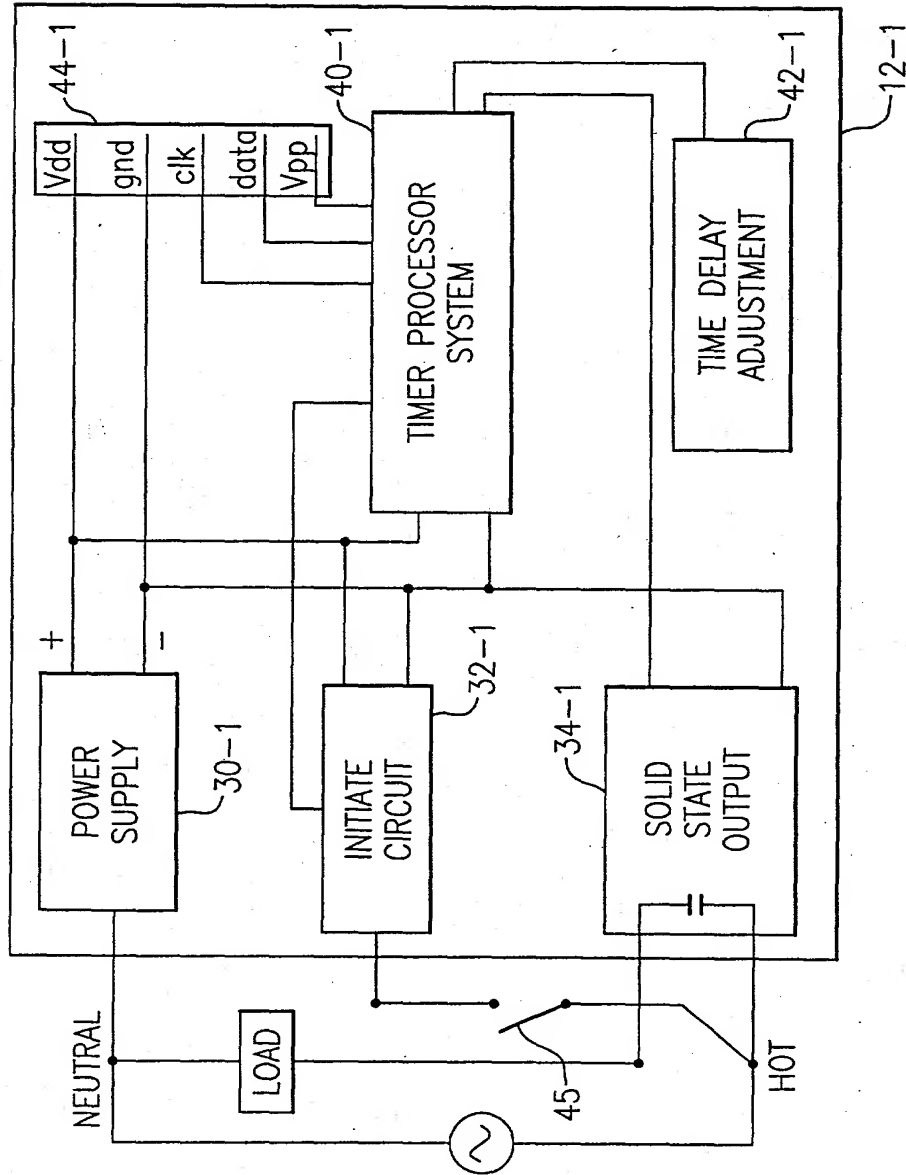


FIG. 2b

208040" 68E/E007



FIG. 2c

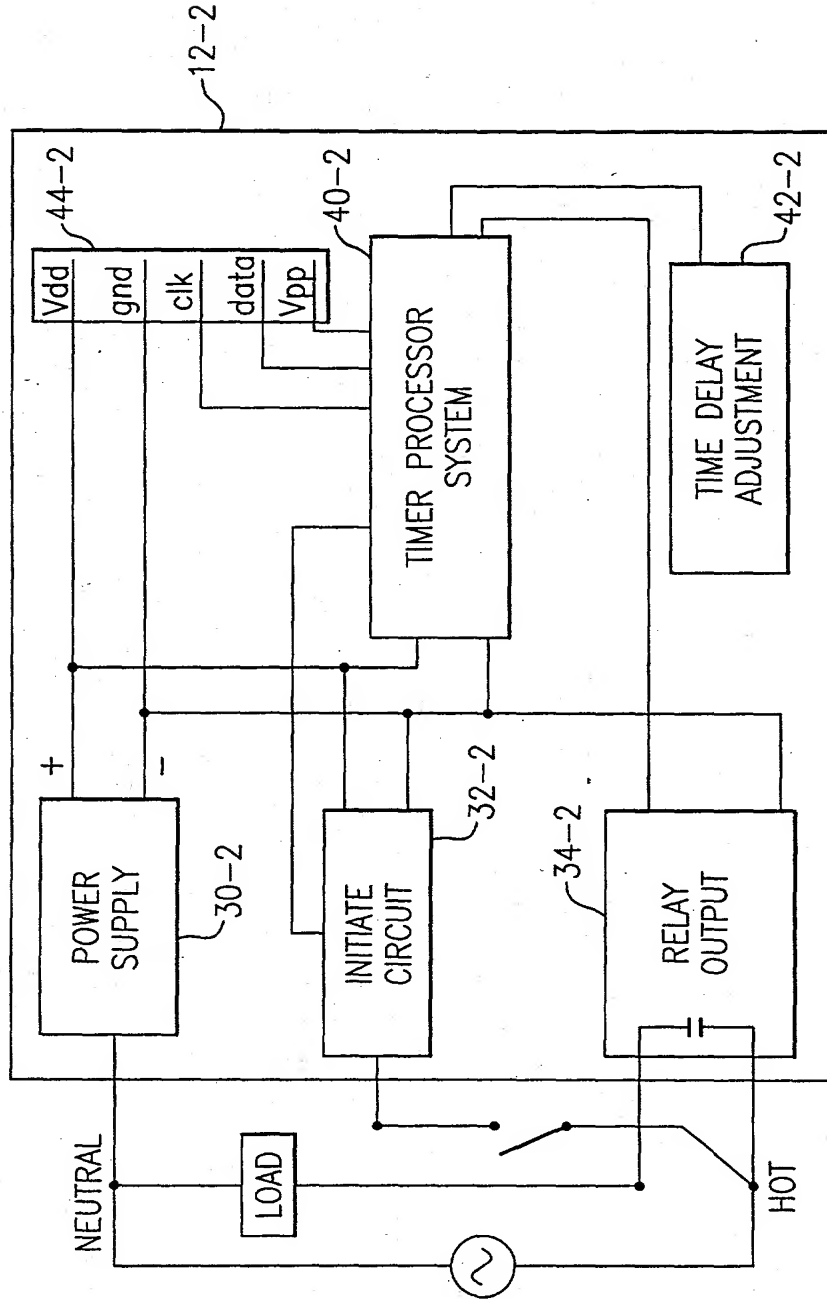


FIG. 2d

208040-68E/EDOT



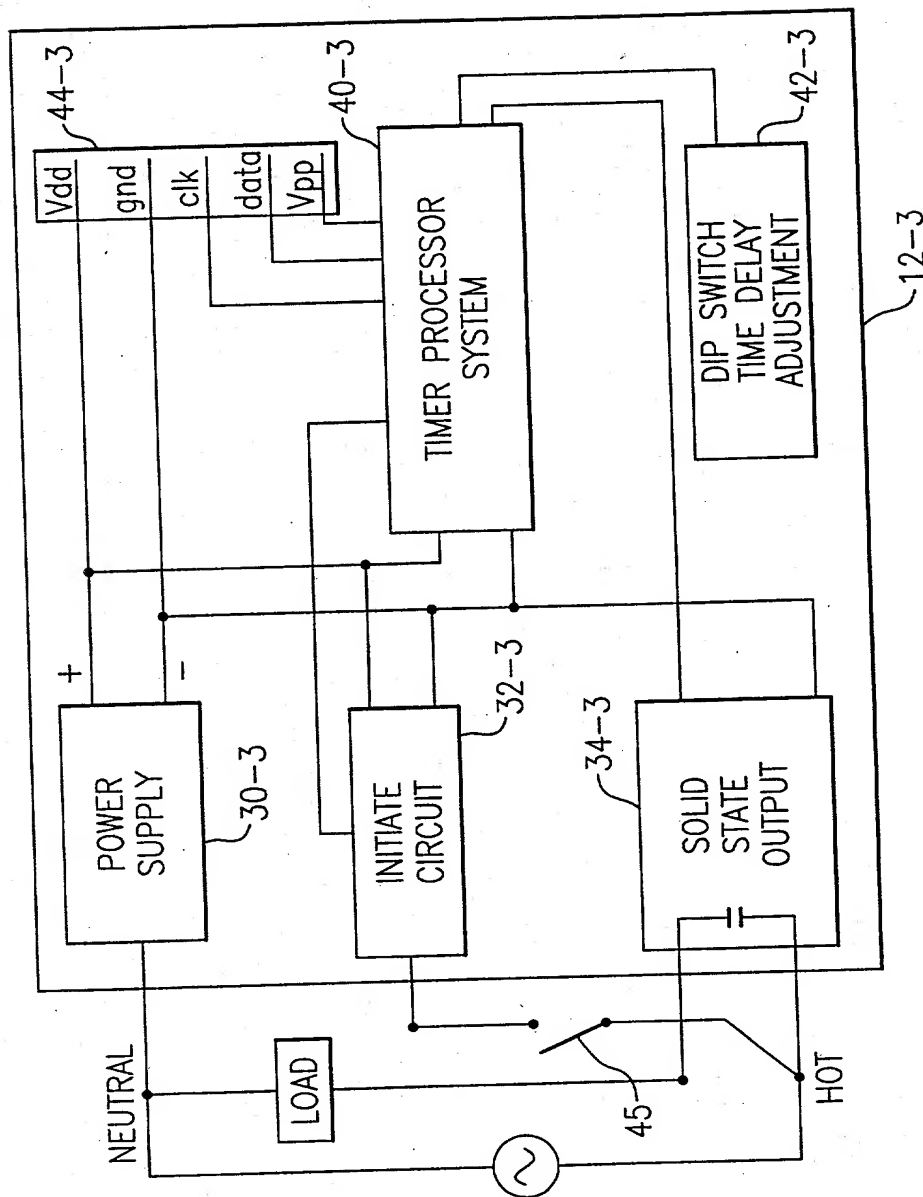


FIG. 2f

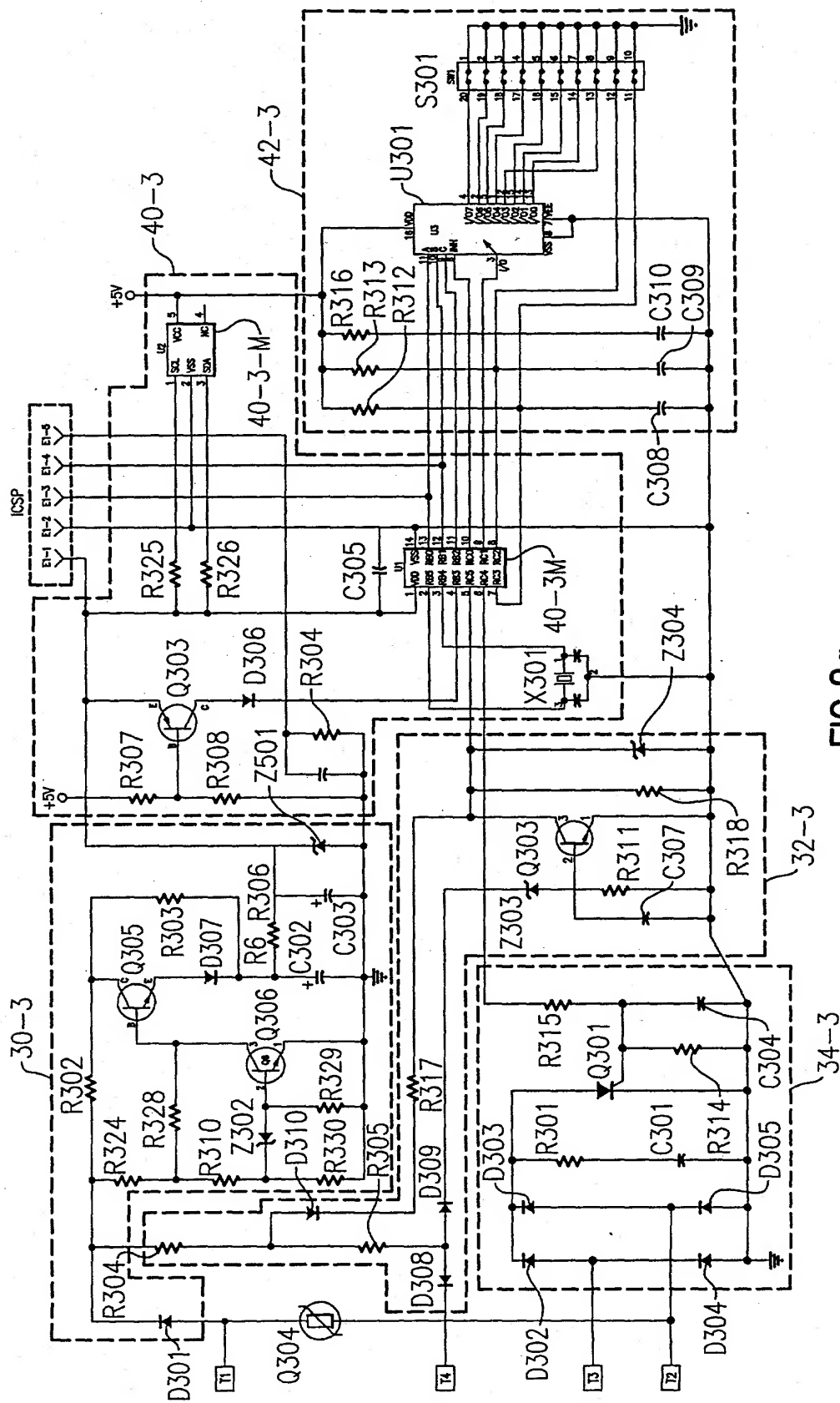


FIG. 2g

16-1

MODEL NUMBER	SUPPLY VOLTAGE	TIMER FUNCTION	TIME		FIXED TIME DELAY	TIMING RANGE
			DELAY	FUNCTION		
XXX	120VAC	DELAY ON MAKE	FIXED		10s	—
XXY	120VAC	DELAY ON MAKE	FIXED		20s	—
XXZ	120VAC	DELAY ON BREAK	FIXED		10s	—
YXX	230VAC	DELAY ON MAKE	FIXED		10s	—
YXY	230VAC	DELAY ON MAKE	FIXED		20s	—
YZZ	230VAC	DELAY ON BREAK	FIXED		10s	—
ZXX	120VAC	DELAY ON MAKE	ADJUSTABLE		—	0-10s
ZXY	120VAC	DELAY ON MAKE	ADJUSTABLE		—	0-20s
ZXZ	120VAC	DELAY ON BREAK	ADJUSTABLE		—	0-10s
YXX	230VAC	DELAY ON MAKE	ADJUSTABLE		—	0-10s
YXY	230VAC	DELAY ON MAKE	ADJUSTABLE		—	0-10s
XYZ	230VAC	DELAY ON BREAK	ADJUSTABLE		—	0-10s

56

58

60

62

64

66

68

FIG. 3a

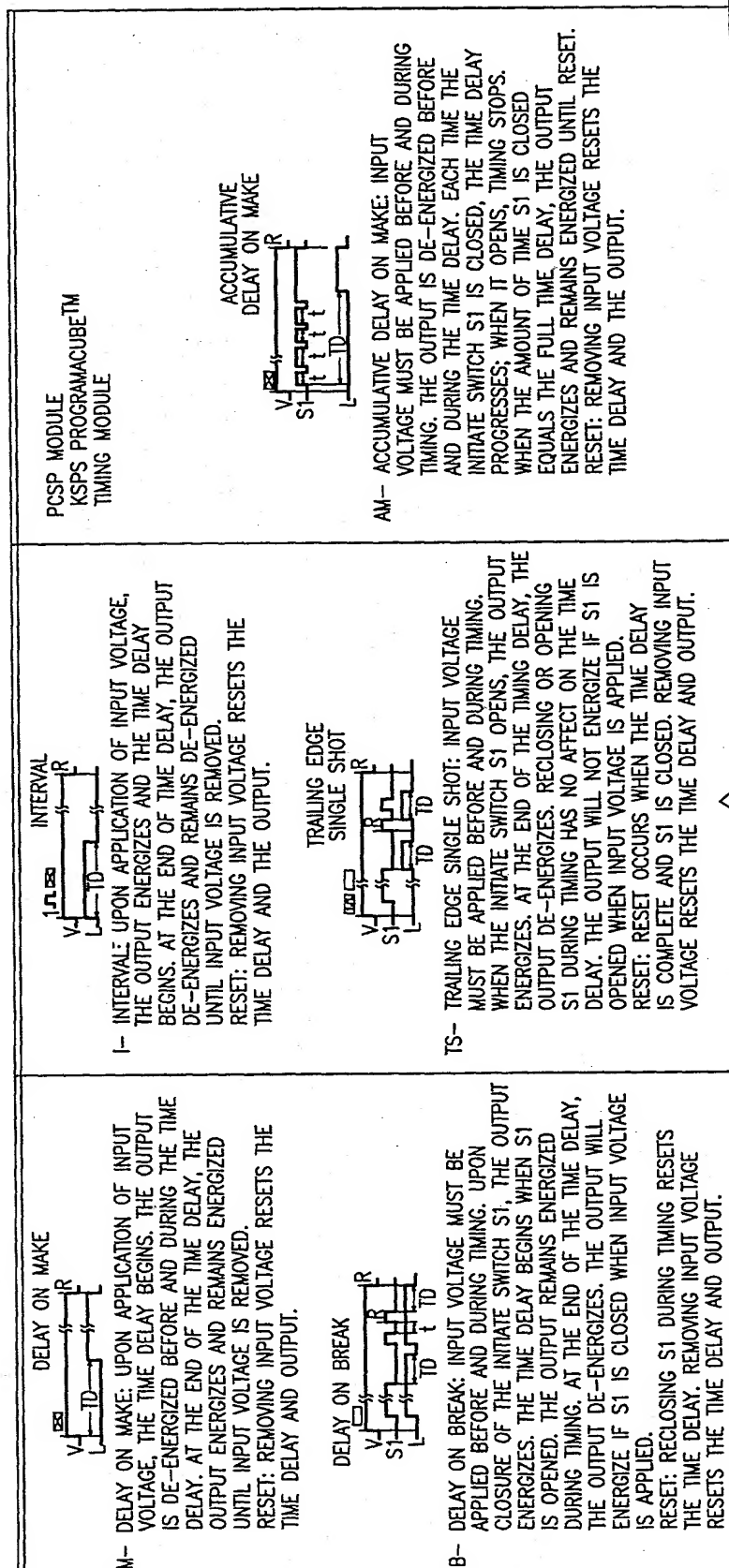
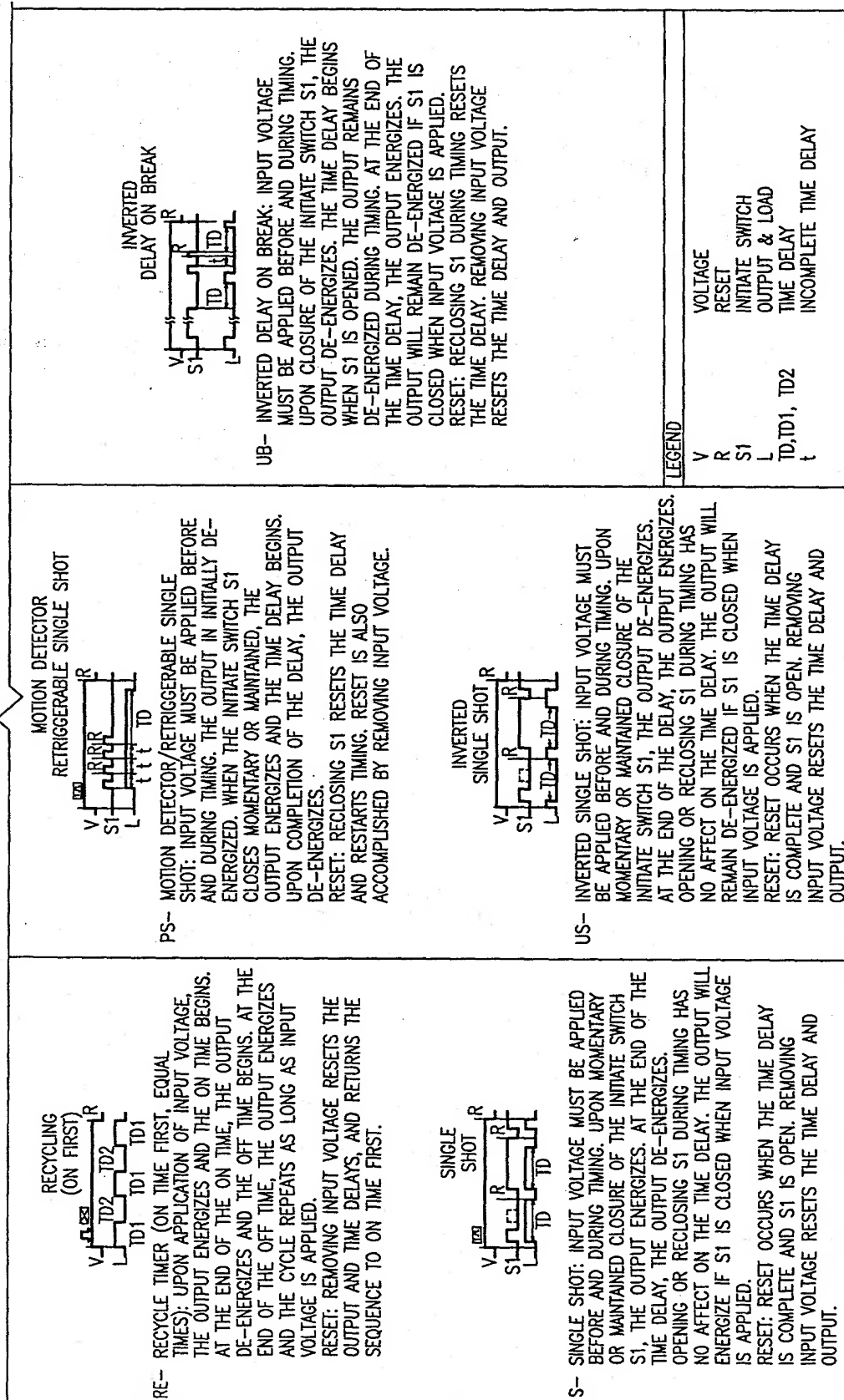


FIG. 3b(1)

208040" 68E4E00T

J I P E JC174
 APR 08 2002
 PATENT &



16-2
FIG. 3b(2)

208040" 68E4E007

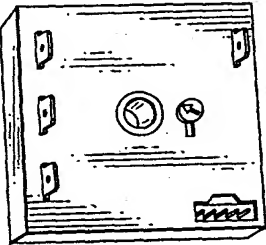
PCSP MODULE KSPS PROGRAMACUBE TIMINGMODULE	DESCRIPTION	PCSP MODULE KSPS PROGRAMACUBE TIMINGMODULE																																	
	<p>PRELIMINARY DATA SHEET-AVAILABLE DATES: ACVOLTAGESJUNE2001;DCVOLTAGESAUGUST2001</p> <p>THE KSPS SERIES IS A FACTORY PROGRAMMED MODULE AVAILABLE IN ANY 1 OF 10 STANDARD FUNCTIONS. THE KSPS OFFERS A SINGLE, FIXED, OR AN ADJUSTABLE TIME DELAY. MODULES ARE MANUFACTURED AND PLACED IN STOCK. WHEN AN ORDER IS RECEIVED, THE FUNCTION SOFTWARE IS ADDED, MAKING THE MODULES COMPLETE. THIS PROVIDES FAST DELIVERY ON ALL PART NUMBERS. THE 1A STEADY, 10A IN RUSH RATED SOLID STATE OUTPUT PROVIDES 100 MILLION OPERATIONS TYPICAL. ITS MICROCONTROLLER TIMING CIRCUIT PROVIDES EXCELLENT REPEAT ACCURACY AND STABILITY. ENCAPSULATION PROTECTS AGAINST SHOCK, VIBRATION, AND HUMIDITY. THE KSPS SERIES IS A COST EFFECTIVE APPROACH FOR OEM APPLICATIONS THAT REQUIRE SMALL SIZE, SOLID STATE RELIABILITY, AND IN STOCK MODULES.</p> <p>PATENTPENDING</p> <p>□ APPROVALS: C8 91 59 CE C9</p>	<p>□ IN STOCK, FACTORY PROGRAMMED, SHIPPED FAST □ CHOOSE 1 OF 10 STANDARD FUNCTIONS □ MICROCONTROLLER CIRCUITRY, $\pm 1\%$ REPEAT ACCURACY □ SOLID STATE OUTPUT 1 A STEADY, 10 A INRUSH □ KNOB, EXTERNAL ADJUST OR FIXED TIME DELAY □ 12...230 V IN 6 RANGES □ DELAYS FROM 100 ms...1000 h</p> <p>C7</p>																																	
<p>ORDERING TABLE</p> <table border="1"><thead><tr><th>YKSPS SERIES</th><th>INPUT</th><th>ADJUSTMENT</th><th>TIME DELAY **</th><th>FUNCTION **</th></tr></thead><tbody><tr><td rowspan="5">C1-C5</td><td>1-12VDC</td><td>1-FIXED</td><td>1--0.1...10s</td><td rowspan="5">FUNCTION ** L-SPECIFY FUNCTION (REFER TO FUNCTION CHART FOR CODE)</td></tr><tr><td>2-24VAC</td><td>2-KNOB/ADJUST</td><td>2-1...100s</td></tr><tr><td>3-24VDC</td><td>3-EXTERNAL ADJUST</td><td>3-10...1000s</td></tr><tr><td>4-120VAC</td><td></td><td>4-0.1...10m</td></tr><tr><td>5-120VDC</td><td></td><td>5-1...100m</td></tr><tr><td rowspan="3">C6</td><td rowspan="3">9-120/230VAC</td><td rowspan="3"></td><td>6-10...1000m</td><td rowspan="3">*IF FIXED DELAY IS SELECTED, INSERT DELAY 0.1... 1000j FOLLOWED BY (S)SECS.(MM) MINS., OR (H)HRS.</td></tr><tr><td>7-0.1...10h</td></tr><tr><td>8-1...100h</td></tr><tr><td colspan="4">9-10...1000h</td></tr></tbody></table> <p>EXAMPLE P/N: YKSPS923RE FIXED- YKSPS915551</p>			YKSPS SERIES	INPUT	ADJUSTMENT	TIME DELAY **	FUNCTION **	C1-C5	1-12VDC	1-FIXED	1--0.1...10s	FUNCTION ** L-SPECIFY FUNCTION (REFER TO FUNCTION CHART FOR CODE)	2-24VAC	2-KNOB/ADJUST	2-1...100s	3-24VDC	3-EXTERNAL ADJUST	3-10...1000s	4-120VAC		4-0.1...10m	5-120VDC		5-1...100m	C6	9-120/230VAC		6-10...1000m	*IF FIXED DELAY IS SELECTED, INSERT DELAY 0.1... 1000j FOLLOWED BY (S)SECS.(MM) MINS., OR (H)HRS.	7-0.1...10h	8-1...100h	9-10...1000h			
YKSPS SERIES	INPUT	ADJUSTMENT	TIME DELAY **	FUNCTION **																															
C1-C5	1-12VDC	1-FIXED	1--0.1...10s	FUNCTION ** L-SPECIFY FUNCTION (REFER TO FUNCTION CHART FOR CODE)																															
	2-24VAC	2-KNOB/ADJUST	2-1...100s																																
	3-24VDC	3-EXTERNAL ADJUST	3-10...1000s																																
	4-120VAC		4-0.1...10m																																
	5-120VDC		5-1...100m																																
C6	9-120/230VAC		6-10...1000m	*IF FIXED DELAY IS SELECTED, INSERT DELAY 0.1... 1000j FOLLOWED BY (S)SECS.(MM) MINS., OR (H)HRS.																															
			7-0.1...10h																																
			8-1...100h																																
9-10...1000h																																			
<p>PCSP MODULE KSPS PROGRAMACUBE TIMINGMODULE</p> <p>THE KSPS SERIES IS A FACTORY PROGRAMMED MODULE AVAILABLE IN ANY 1 OF 10 STANDARD FUNCTIONS. THE KSPS OFFERS A SINGLE, FIXED, OR AN ADJUSTABLE TIME DELAY. MODULES ARE MANUFACTURED AND PLACED IN STOCK. WHEN AN ORDER IS RECEIVED, THE FUNCTION SOFTWARE IS ADDED, MAKING THE MODULES COMPLETE. THIS PROVIDES FAST DELIVERY ON ALL PART NUMBERS. THE 1A STEADY, 10A IN RUSH RATED SOLID STATE OUTPUT PROVIDES 100 MILLION OPERATIONS TYPICAL. ITS MICROCONTROLLER TIMING CIRCUIT PROVIDES EXCELLENT REPEAT ACCURACY AND STABILITY. ENCAPSULATION PROTECTS AGAINST SHOCK, VIBRATION, AND HUMIDITY. THE KSPS SERIES IS A COST EFFECTIVE APPROACH FOR OEM APPLICATIONS THAT REQUIRE SMALL SIZE, SOLID STATE RELIABILITY, AND IN STOCK MODULES.</p> <p>PATENTPENDING</p> <p>□ APPROVALS: C8 91 59 CE C9</p>																																			
<p>PCSP MODULE KSPS PROGRAMACUBE TIMINGMODULE</p> <p>THE KSPS SERIES IS A FACTORY PROGRAMMED MODULE AVAILABLE IN ANY 1 OF 10 STANDARD FUNCTIONS. THE KSPS OFFERS A SINGLE, FIXED, OR AN ADJUSTABLE TIME DELAY. MODULES ARE MANUFACTURED AND PLACED IN STOCK. WHEN AN ORDER IS RECEIVED, THE FUNCTION SOFTWARE IS ADDED, MAKING THE MODULES COMPLETE. THIS PROVIDES FAST DELIVERY ON ALL PART NUMBERS. THE 1A STEADY, 10A IN RUSH RATED SOLID STATE OUTPUT PROVIDES 100 MILLION OPERATIONS TYPICAL. ITS MICROCONTROLLER TIMING CIRCUIT PROVIDES EXCELLENT REPEAT ACCURACY AND STABILITY. ENCAPSULATION PROTECTS AGAINST SHOCK, VIBRATION, AND HUMIDITY. THE KSPS SERIES IS A COST EFFECTIVE APPROACH FOR OEM APPLICATIONS THAT REQUIRE SMALL SIZE, SOLID STATE RELIABILITY, AND IN STOCK MODULES.</p> <p>PATENTPENDING</p> <p>□ APPROVALS: C8 91 59 CE C9</p>																																			

FIG. 3b(3)

208040" 68E2E00T

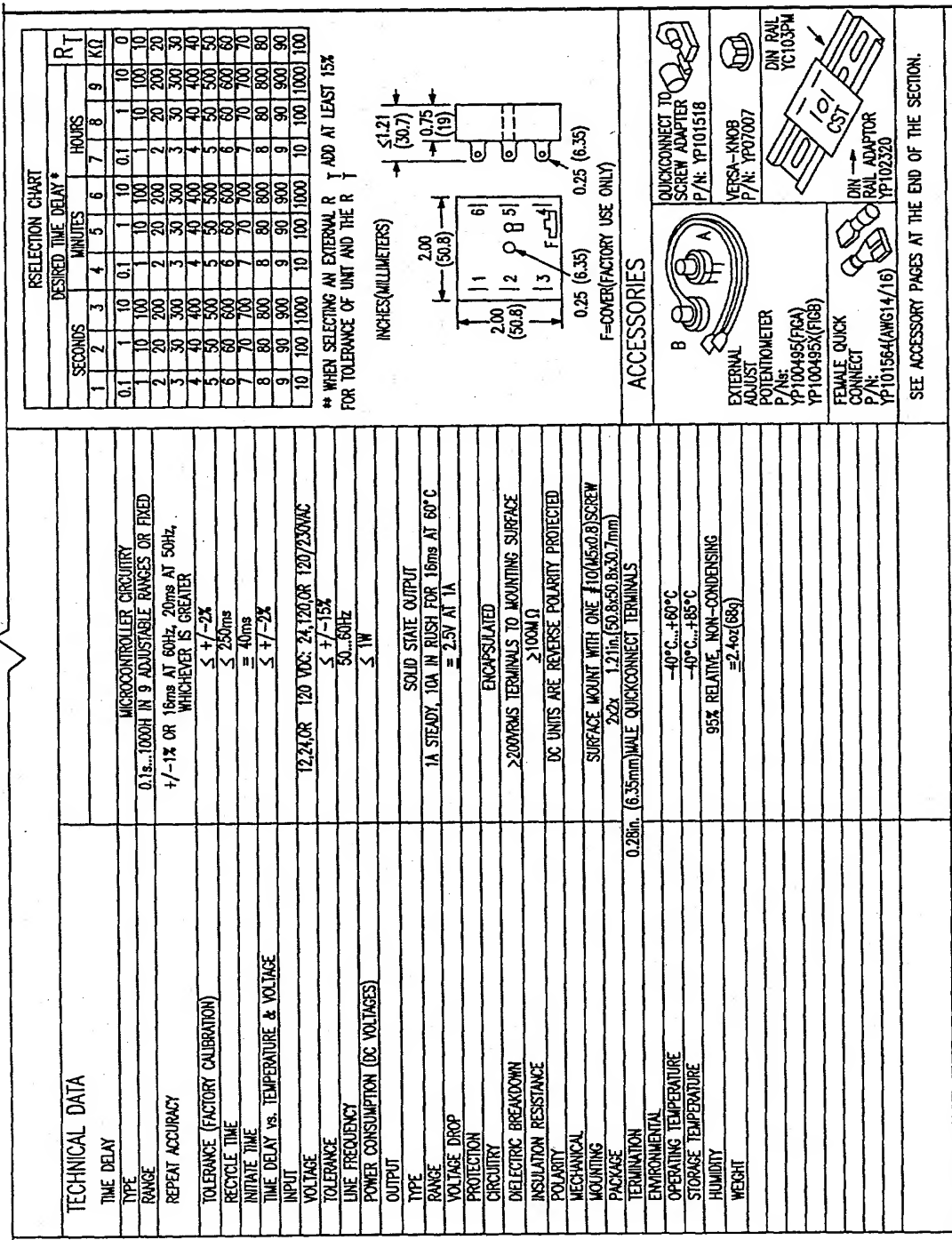


FIG.3b(4)

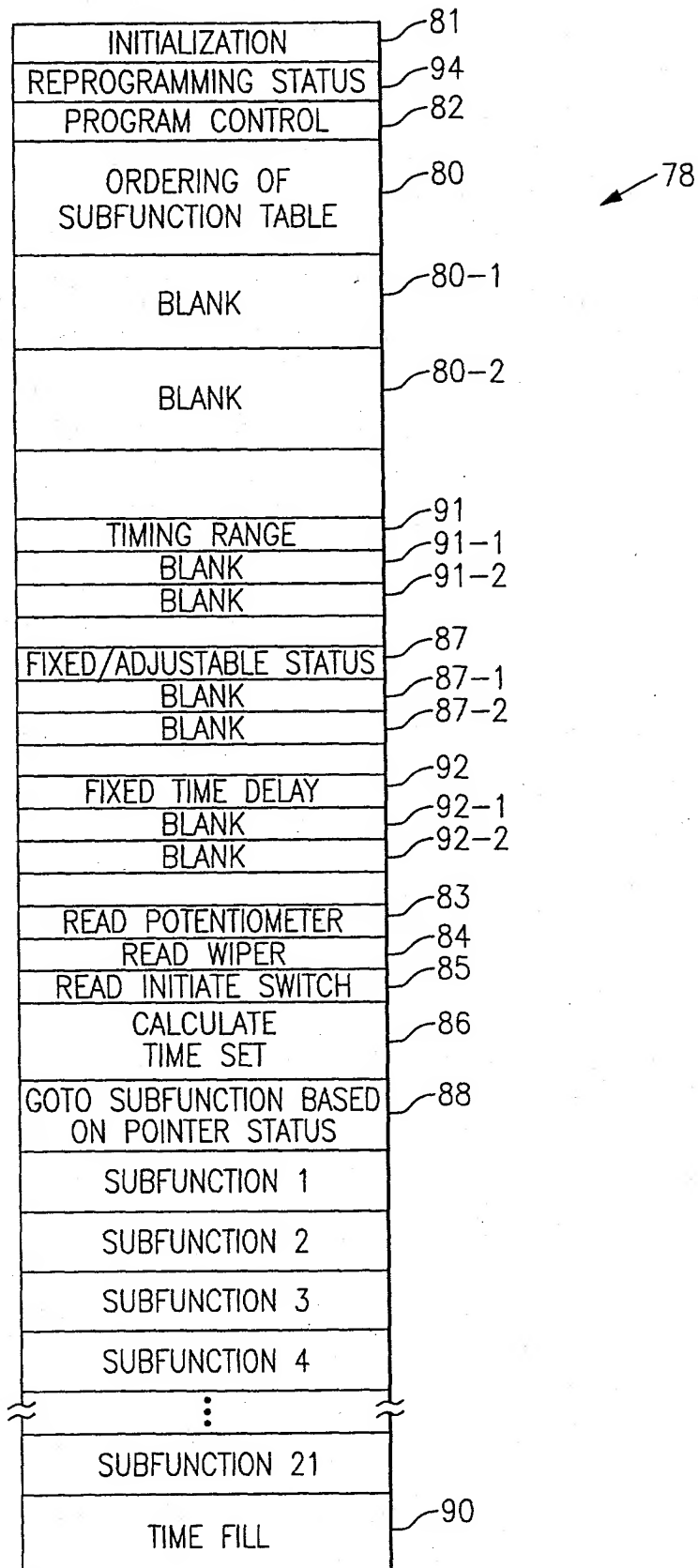


FIG.4

208040" 68E2E00T

FIG. 5a

FORM4

EXIT

TO DEVELOP YOUR OWN TIMING FUNCTIONS, SELECT THE FUNCTIONS BY DOUBLE CLICKING FROM THE LIST BELOW. YOU MUST SELECT THEM IN THE ORDER WHICH THEY ARE TO BE EXECUTED. YOU ALSO MUST SELECT EXACTLY (8) SUB FUNCTIONS. TO STOP DEVELOPMENT YOU MAY CLICK AT ANY TIME.

1: TURN LOAD ON

2: TURN LOAD OFF

3: MAINTAIN CURRENT OUTPUT STATE FOREVER

4: MAINTAIN CURRENT OUTPUT STATE UNTIL ON → OFF TRANSITION OF THE INITIATE SWITCH OCCURS

5: MAINTAIN CURRENT OUTPUT STATE UNTIL OFF → ON TRANSITION OF THE INITIATE SWITCH OCCURS

6: MAINTAIN CURRENT OUTPUT STATE UNTIL TD1 EXPIRES

7: MAINTAIN CURRENT OUTPUT STATE UNTIL TD1 EXPIRES, RESET TD1 ON ON → OFF TRANSITION OF THE INITIATE SWITCH

8: MAINTAIN CURRENT OUTPUT STATE UNTIL TD1 EXPIRES, RESET TD1 ON OFF → ON TRANSITION OF THE INITIATE SWITCH

9: START OVER

10: ACCUMULATE TD1 WHILE THE INITIATE SWITCH IS CLOSED UNTIL EXPIRES, HOLD TD1 RESET WHILE THE INITIATE SWITCH IS OPEN.

11: ACCUMULATE TD1 WHILE THE INITIATE SWITCH IS CLOSED UNTIL EXPIRES, DO NOT RESET TD1 WHEN THE INITIATE SWITCH OPENS.

12: ACCUMULATE TD1 WHILE THE INITIATE SWITCH IS OPEN UNTIL TD1 EXPIRES, HOLD TD1 RESET WHILE THE INITIATE SWITCH IS CLOSED.

13: RECYCLE WITH EQUAL ON AND OFF TIMES USING TD1 (ON TIME FIRST)

14: RECYCLE WITH EQUAL ON AND OFF TIMES USING TD2 (ON TIME FIRST)

15: MAINTAIN CURRENT OUTPUT STATE UNTIL TD2 EXPIRES

16: MAINTAIN CURRENT OUTPUT STATE UNTIL TD2 EXPIRES, RESET TD2 ON ON → OFF TRANSITION OF THE INITIATE SWITCH.

17: MAINTAIN CURRENT OUTPUT STATE UNTIL TD2 EXPIRES, RESET TD2 ON OFF → ON TRANSITION OF THE INITIATE SWITCH.

18: ACCUMULATE TD2 WHILE THE INITIATE SWITCH IS OPEN UNTIL TD2 EXPIRES, HOLD TD2 RESET WHILE THE INITIATE SWITCH IS CLOSED.

SUB FUNCTIONS YOU HAVE SELECTED

2: TURN LOAD OFF

6: MAINTAIN CURRENT OUTPUT STATE UNTIL TD1 EXPIRES

1: TURN LOAD ON

14: RECYCLE WITH EQUAL ON AND OFF TIMES USING TD2 (ON TIME FIRST)

3: MAINTAIN CURRENT OUTPUT STATE FOREVER

3: MAINTAIN CURRENT OUTPUT STATE FOREVER

9: START OVER

FIG.5b